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MARKSCHEME

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BUSINESS AND MANAGEMENT

Standard Level

Paper 1

14 pages

The markbands on pages 3–4 should be used where indicated in the markscheme.

Section A			Level descriptors
Q1 (c)	Q2 (c)	Q3 (c)	
Marks 0–7			
0			• No knowledge or understanding of relevant issues, concepts and theories. • No use of appropriate terminology.
1–2			• Little knowledge and understanding of relevant issues, concepts and theories. • Little use of appropriate terminology. • No reference is made to the information in the case study.
3–5			• A description or partial analysis/examination with relevant knowledge and/or understanding of relevant issues, concepts and theories. • Some use of appropriate terminology. • Some reference is made to the information in the case study, not just to the name of the organization. • At the lower end of the markband responses are mainly theoretical.
6–7			• A balanced analysis/examination with accurate, specific, well-detailed knowledge and understanding of relevant issues, concepts and theories. • An analysis/examination that uses appropriate terminology throughout the response. • Explicit references are made to the information in the case study.

Section B Q4 (e) Marks 0–8	Level descriptors
0	• No knowledge or understanding of relevant issues, concepts and theories. • No use of appropriate terminology.
1–2	• Little knowledge and understanding of relevant issues, concepts and theories. • Little use of appropriate terminology. • No evidence of judgments and/or conclusions. • No reference is made to the information in the case study.
3–4	• A description with some knowledge and/or understanding of relevant issues, concepts and theories. • Some use of appropriate terminology. • No evidence of judgments and/or conclusions. • Some reference is made to the information in the case study, not just to the name of the organization. • The response is mainly theoretical.
5–6	• A response with relevant knowledge and understanding of relevant issues, concepts and theories. • A response that uses relevant and appropriate terminology. • Evidence of judgments and/or conclusions that are little more than unsubstantiated statements that has balanced analysis and demonstrates understanding. • Explicit references to the information in the case study are made at places in the response.
7–8	• A response with accurate, specific, well-detailed knowledge and understanding of relevant issues, concepts and theories. • A response that uses appropriate terminology competently throughout the response. • A response that includes judgments and/or conclusions that is well supported and underpinned by a balanced analysis. • Explicit references to the information in the case study are made throughout the response.

SECTION A

1. (a) Define the following terms:

(i) ***economies of scale (line 16)*** ***[2 marks]***

Economies of scale refer to the decrease in cost per unit produced, as the total scale of the production facility increases.

Candidates are **not** expected to word their definition **exactly** as above.

Award ***[1 mark]*** for a basic definition that conveys partial knowledge and understanding.

Award ***[2 marks]*** for a full, clear definition that conveys knowledge and understanding, with reference to **both** decrease in cost per unit **and** increase in scale of production.

For **only** a relevant example **or** application to the stimulus award ***[1 mark]***.

(ii) ***empowerment (line 35).*** ***[2 marks]***

Empowerment is a form of non-financial reward and a motivational technique; it means that some power is given to employees so they can make some of their own decisions regarding their working life (for instance they may have control over how to use their time and decide which tasks could be done from home).

Candidates are **not** expected to word their definition **exactly** as above.

Award ***[1 mark]*** for a basic definition that conveys partial knowledge and understanding.

Award ***[2 marks]*** for a full, clear definition that conveys knowledge and understanding similar to the answer above with reference to decision making.

For **only** a relevant example **or** application to the stimulus award ***[1 mark]***.

(b) With reference to *RDB*, distinguish between internal growth and external growth. ***[4 marks]***

Internal growth (also called organic growth) refers to the growth of a business (*RDB* in this case) through increasing sales (for example, developing first-mover advantage in the market for "technologically advanced, energy-efficient ball bearings" *(lines 95–96)*) or developing marketing activities (hence Anna's idea of using "engineers-turned-salesmen" *(line 116)*). Internal growth is also possible by cutting costs and selling goods at a lower price, thereby increasing market share, though there is no reference to this in the case study.

External growth takes place through external solutions, such as joint ventures and mergers and acquisitions. Valdemar suggested strategic alliances which would be a form of external growth with companies based in Brazil, China and India. Strategic alliances would enable *RDB* to operate or at least sell directly in those countries, without having to develop its own marketing activities there.

Mark as 2 + 2.

Award ***[1 mark]*** for a basic definition of each type of growth. Award another ***[1 mark]*** for an application to *RDB* up to a maximum of ***[2 marks]***.

(c) Analyse the advantages and disadvantages of each new *RDB* factory being "jointly managed by one experienced *RDB* senior manager from Europe and one local manager familiar with the language and culture" *(lines 100–101)*. *[7 marks]*

Advantages include the following:

- the factories will benefit from having two managers who combine forces (in terms of synergy, when adding the experience of the European *RDB* senior manager and the field knowledge of the newly appointed local manager)
- having two complementary managers avoids the problem of *RDB* headquarters having to decide who to appoint as a sole manager: on their own, expats from northern Europe might struggle to be accepted and respected; on their own, newly appointed local managers might not appreciate the *RDB* culture of high-quality ball bearings
- for *RDB* as a whole, this means a more diverse workforce, which is in line with Anna's ideas about reflecting customers' profiles; diversity in the workforce is often seen as a vector of creativity; it is also more politically correct and it seems that Anna has that agenda too
- communication between head office and managers, and managers and employees
- *accept any other relevant advantage*.

Disadvantages include the following:

- the two managers, being from different cultural backgrounds, could be prejudiced against each other, or could have different values and attitudes, which might create tension or conflict between them and hinder communication between them
- the two managers may have different management/leadership styles, which could be confusing for the employees, for example if one is more autocratic and the other more democratic
- the two managers may have different ideas about quality control, operations or marketing, which could slow the decision-making process in the factories
- *accept any other relevant disadvantage*.

Accept any other relevant analysis.

Candidates are **not** expected to refer to all of the above points for top marks, but their analysis must be balanced in order to reach the highest level of the markband.

Marks should be allocated according to the markbands on page 3.

2. (a) By the 1970s, Japanese companies had moved to just-in-time production *(line 26)*. Outline *one* advantage and *one* disadvantage of just-in-time production. ***[4 marks]***

Advantages of just-in-time production stock control include:
- it improves the working capital cycle (as the companies only produce the ball bearings that have been ordered: they do not keep stock, so there is no capital "blocked" in the form of stock)
- it reduces storage costs (unlike with a just-in-case approach)
- it reduces the chances of holding unsellable stock (if business customers change specification or requirements)
- *accept any other relevant advantage*.

Disadvantages of just-in-time production stock control include:
- unlike with a just-in-case approach, sudden large orders cannot be met (as there is no stock), so customers could then turn to competitors
- if the suppliers also operate on a just-in-time basis, it can create some delays
- *accept any other relevant disadvantage*.

Accept any other relevant answer.

N.B. Accept answers that only refer to just-in-time stock control.

Mark as 2 + 2.

Award ***[1 mark]*** for each relevant advantage/disadvantage identified, award an additional ***[1 mark]*** for the development of that advantage/disadvantage up to a maximum of ***[2 marks]***.

(b) Using data from the additional information on page 3, calculate *RDB's*:

(i) gross profit margin in 1970 *and* 1975. ***[2 marks]***

	1970	1975
Gross profit margin	$\frac{(118-55)}{118}\times 100$ $= 53.39\%$ (to 2 d.p.)	$\frac{(164-92)}{164}\times 100$ $= 43.90\%$ (to 2 d.p.)

Award ***[1 mark]*** for each correct calculation up to a maximum of ***[2 marks]*** (no working required). Allow appropriate rounding.

(ii) acid test (quick) ratio in 1970 *and* 1975. ***[2 marks]***

	1970	1975
Acid test (quick) ratio	$\frac{(19+25+46-46)}{16}$ $= 2.75$ times	$\frac{(28+32+64-64)}{26}$ $= 2.31$ times (to 2 d.p.)

Award ***[1 mark]*** for each correct calculation up to a maximum of ***[2 marks]*** (no working required). Allow appropriate rounding.

(c) Interpret the results from your calculations in part (b). ***[7 marks]***

The gross profit margin of *RDB* declined significantly between 1970 and 1975, falling from 53.39% to 43.90%. Profitability from the manufacturing process declined. In the case study, mention is made of intensifying competition from Japanese manufacturers. In all likelihood, as Japanese firms became more fierce competitors, companies such as *RDB* had to lower sales prices of its products. With lower sales prices, the gross profit margin contracted.

With the decline in profitability but with expanding operations, *RDB's* liquidity weakened – though it was still strong. The acid test ratio fell from 2.75 times in 1970 to 2.31 times in 1975. The expanded operations meant that *RDB* had to commit greater funds to support its growth thus decreasing liquidity.

It is arguable that *RDB's* acid test ratio was too high (that it had too much money tied up in low-yielding assets and that the decrease in the acid test ratio was actually a positive development).

In isolation, the decline in gross profit margin is a negative development, the slight deterioration in liquidity less so. However, as part of a long-term trend, these developments were worrisome.

Accept any other relevant interpretation.

Apply Own Figure Rule (OFR) from calculations made in part (b).

Marks should be allocated according to the markbands on page 3. The balance required for higher marks means that both profitability and liquidity ratios need to be interpreted.

3. (a) Describe *one* consequence of the likely relocation of the factories *(lines 96–99)*:

(i) for *one* internal stakeholder of *RDB*. ***[2 marks]***

An example of one internal stakeholder that would be affected by the relocation is the **workforce** in the Swedish megafactory: as *RDB* would be closing their workplace, many would be laid off. Some might be offered jobs in the new factories (for example, some of the senior managers) but the majority of workers' jobs would be made redundant and the workers themselves would become unemployed.

Accept any other relevant internal stakeholder with a description.

Award ***[1 mark]*** for a basic description of the consequence; award an additional ***[1 mark]*** for the development of that point, up to a maximum of ***[2 marks]***. Award ***[0 marks]*** if the stakeholder is not internal or is not precisely identified.

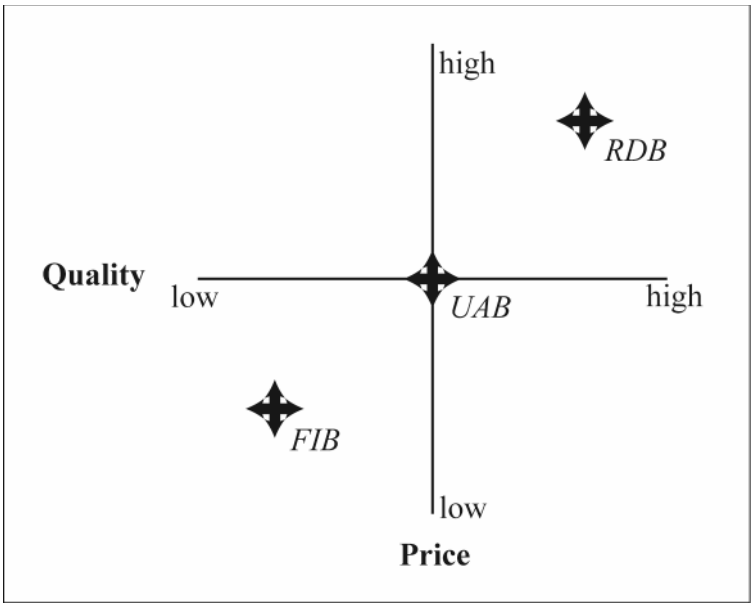
(ii) for *one* external stakeholder of *RDB*. ***[2 marks]***

An example of one external stakeholder that would be affected by the relocation is the **Swedish government**: firstly, they would lose all the business rates (taxes) paid by *RDB*; secondly, they would see an increase in unemployment in the towns that were dependent on *RDB* (for direct and indirect jobs); thirdly, as "the Swedish factory was so large that railroad lines had been installed in order to deliver supplies and to transport finished products" *(lines 139–140)*, the Swedish government might try to put pressure on *RDB* to keep the factory there.

Accept any other relevant external stakeholder with a description.

Award ***[1 mark]*** for a basic description of the consequence; award an additional ***[1 mark]*** for the development of that point, up to a maximum of ***[2 marks]***. Award ***[0 marks]*** if the stakeholder is not external or is not precisely identified.

(b) Using information in lines 19–21, construct a position map of the ball bearing industry in the 1930s and place *RDB* and its two main competitors on it. ***[4 marks]***



Award ***[1 mark]*** for the overall layout of the position map with **both** axes correctly labelled (quality and price) and high/low clearly indicated. ***N.B.*** it does not matter which axis is horizontal/vertical.
Award ***[1 mark]*** for correct positioning of *RDB* in the quadrant "high quality and high price".
Award ***[1 mark]*** for correct positioning of *UAB* at the centre of the model (to show "medium quality and medium price").
Award ***[1 mark]*** for correct positioning of *FIB* in the quadrant "low quality and low price".

(c) Analyse the advantages and disadvantages for *RDB* of becoming a public limited company *(line 123)*. ***[7 marks]***

Becoming a public limited company means that *RDB* shares would traded on the stock market. By selling shares to the general public, they would be able to rapidly raise more funds, hence Anna's keenness, as that extra capital is essential to implement her "*RDB* 2020" vision. Supporting further expansion by changing status from a private to a public limited company is a common method to raise capital – however there are several disadvantages. *RDB's* audited accounts would have to be released to the public, but more importantly *RDB* would become vulnerable to takeover bids and the Holstein family would also lose some control and ownership (hence Valdemar's resistance). Moreover, the value of *RDB* shares may also be very dependent upon stock exchange fluctuations.

Accept any other relevant analysis.

Candidates are **not** expected to cover all the above-mentioned points.

Marks should be allocated according to the markbands on page 3.

SECTION B

4. (a) Outline why ball bearings are particularly important in the secondary sector of the economy. ***[2 marks]***

The secondary sector of the economy is about manufacturing (for example, the construction of cars and vehicles) – and this type of engineering often requires ball bearings (both in the car factories and in the cars themselves).

Candidates are **not** expected to answer exactly as above.

Award ***[1 mark]*** for a basic answer (for example an answer that only defines secondary sector without explicit reference to ball bearings in manufacturing).

Award ***[2 marks]*** for a full, clear answer that conveys knowledge and understanding similar to the answer above.

For **only** a relevant example **or** application to the stimulus award ***[1 mark]***.

(b) Describe an autocratic leadership style. ***[2 marks]***

An autocratic leadership style is one where the leader wants to hold on to as much power, authority and control as possible, without delegating and without consulting the employees who are just expected to obey.

Candidates are **not** expected to answer exactly as above.

Award ***[1 mark]*** for a basic description that conveys partial knowledge and understanding by making one valid point about autocratic leadership style.

Award ***[2 marks]*** for a full, clear description that conveys knowledge and understanding by making two or more valid points.

For **only** a relevant example **or** application to the stimulus award ***[1 mark]***.

(c) Explain Valdemar Holstein's suggestion of hiring local salesmen who would be "paid low salaries, but with high commissions as an incentive" *(lines 152–153)*. ***[4 marks]***

Valdemar has become aware of the importance of having a more diverse workforce, especially regarding the salespeople working in the field in Brazil, China, and India, visiting potential customers to try to generate orders from them. That salesforce needs to have knowledge of the local languages and cultures; to motivate them, Valdemar suggests a system of commissions *ie* besides a small, basic salary, they would receive a commission (typically calculated as a percentage) of the value of the business they create for *RDB*. This would be an incentive for them (because the more orders they get, the more they earn) and it would eventually benefit *RDB* too – a win-win solution.

Accept any other relevant explanation.

Award ***[1 mark]*** for each basic point; award an additional ***[1 mark]*** for the development of that point, up to a maximum of ***[4 marks]***.

(d) With reference to *RDB*, distinguish between primary research and secondary research. ***[4 marks]***

Primary research is carried out by staff from *RDB's* marketing department, who could be carrying out surveys or interviews from existing customers (or potential customers) to find out about their satisfaction level (to identify areas of improvement, for example after-sales service), about the image they have of *RDB* (to create a perception map), or about their specific needs (to develop new products if necessary).

Secondary research (also called desk research) means using existing materials (published in professional journals, in the media, by consultants, *etc*); although the information is not directly about *RDB*, it can be useful by providing a background picture (for example, about trends in the demand for greener or more energy-efficient ball bearings, or about ball bearings adapted to the needs of the design community).

Accept any other relevant point.

Mark as 2 + 2.

Award ***[1 mark]*** for each definition (primary research, secondary research); award an additional ***[1 mark]*** for the application to *RDB* (giving an example with reference to *RDB*) up to a maximum of ***[2 marks]***.

(e) Discuss the relative merits of producing ball bearings in small factories as opposed to the three European megafactories. ***[8 marks]***

Megafactories have several merits, especially economies of scale (in different parts of the organization, for example managerial economies of scale, or getting discounts from suppliers or minimizing transport costs). The existing megafactories are also well established in their local environments with loyal workers who are clearly committed to the ongoing success of *RDB* (and may consequently be more productive). These workers are also highly skilled: *RDB* expertise (a tradition that is almost 100 years old!) is linked to the megafactories that seem very well suited for mass production (line production).

Small factories however have merits too, especially in terms of flexibility: the case study stresses the fact that the Japanese competitors of the 1970s became successful thanks to their flexibility – and *RDB* does not seem as flexible, which is not surprising as it based on a different factory model (where configurations cannot be as easily modified and adapted). Small factories may be better suited for job production (for example, for one-off orders) or even for batch production.

Accept any other relevant discussion.

N.B. This question is not about offshoring, location and relocation: the focus is on size (small factories versus megafactories).

It does not matter which conclusion candidates reach at the end of their discussion (*ie* whether it is better to produce ball bearings in small or large factories), however for top marks there must be a final conclusion.

Marks should be allocated according to the markbands on page 4.